

PROCEEDINGS
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A SECOND SPECIES IN THE DIPLOPOD GENUS
CHOCTELLA (SPIROSTREPTIDA: CHOCTELLIDAE)¹

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The remarkable milliped species *Choctella cumminsi*, type of a genus and family endemic in southeastern United States, but having its closest affinities with Neotropical families, was described nearly 50 years ago (Chamberlin, 1918) from specimens taken near Nashville, Tennessee. Subsequently no other material was found until 1950, when Leslie Hubricht collected two specimens in Grundy County, Tennessee, which stimulated the proposal of the family Choctellidae (Chamberlin and Hoffman, 1950).

During the past 14 years, Mr. Hubricht has collected *Choctella* at many localities in central Tennessee and adjacent northern Alabama, but all of the material proved to represent the type species. Recently, Mr. Hubricht sent in five specimens of an unusually distinctive second species which he collected in central Alabama.

For some time I have been preparing a monograph on the morphology, distribution, and systematic position of *Choctella*. However, since several years may elapse prior to publication, I think that advance description of the new form is desirable.

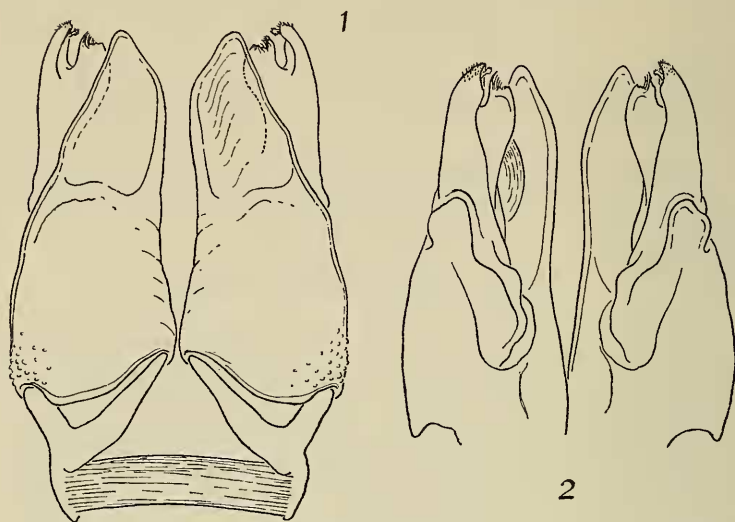
***Choctella hubrichti*, new species**

Figs. 1-3

Type specimens: Male holotype (U.S. Nat. Mus.), two male and two female paratypes (RLH), from wooded hillside, two miles southwest of Roebuck Plaza, Jefferson Co., Alabama, collected on 18 May 1963, by Leslie Hubricht.

Diagnosis: A small species of *Choctella* with the following characteristics: body diameter less than 3.5 mm in males, less than 4.0 mm in females; dorsum nearly black with a sharply defined, moniliform, median

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FIGS. 1, 2. *Choctella hubrichti*, n. sp., 1, gonopods of male holotype, anterior aspect. 2, the same, posterior aspect.

dorsal yellow stripe about one-half as wide as body diameter; telopodite of gonopods distally spiculate, with a small subterminal branch, and with a broad, laminate, distally laciniate lobe on the mesial side (Fig. 3).

Holotype: Male, about 34 mm in length, 3.2 mm in greatest diameter; body with 43 segments, the last three are legless.

Superficially the body appears dark brown, almost black, dorsally, with a broad yellow longitudinal band extending from middle of collum to tip of epiproct; legs and underparts lighter brown. Coloration in detail as follows:

Front of head light reddish-brown, becoming dark brown at labral and genal margins; a dark transverse interantennal band encloses a large oval light spot on each side just mesad to the antennae, and two pairs of much smaller spots near the median line. Epicranium blackish, profusely dotted with reddish-brown flecks; sides of head, mandibles, and gnathochilarium mostly yellowish-white; antennae dilute purplish-brown.

Collum dark brown laterally and along anterior and posterior margins, discally light reddish brown with a subtriangular mid-dorsal yellow spot on the caudal half, and a smaller squarish spot just behind the front margin. Body segments each with a broad, clear, transparent posterior edge (the posterior half of the metazonite); the preceding anterior half of the metazonite dark reddish brown. Dorsolateral half of mesozonite reddish brown with prominent black reticulation down to level of ozopores, below which dark brown like the adjoining metazonite; prozonites essentially concolorous with mesozonites. Each segment dor-

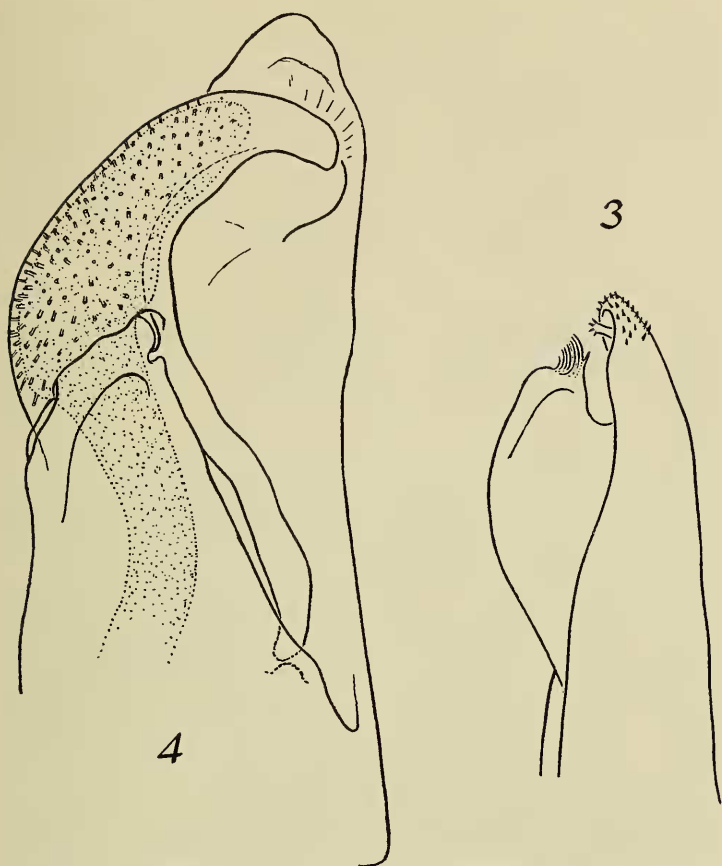


FIG. 3. *Choctella hubrichti*, distal half of telopodite of left gonopod of holotype, caudal aspect, enlarged. FIG. 4. *Choctella cumminsi*, coxite and telopodite of right gonopod, caudal aspect, drawn to same scale as Figs. 1 and 2.

sally with a transversely oval yellow spot, widest just anterior to transverse suture, and a second, smaller but broader, spot on the prozonite; these spots are only narrowly separated and create the effect of a continuous, moniliform, middorsal stripe. Terminal segment uniformly dark brown on the sides, middorsally and midventrally yellowish white. Paraprocts uniformly purplish-brown, narrowly margined with yellow.

Structural details essentially identical with those of *cumminsi* (to be described in full in a later publication). Metazonites prominently striated about two-thirds of the distance up to level of ozopores. On

segments 2-6, the 4th and 5th podomeres of the legs are provided with membranous ventral pads; on segments 8-10, the pads appear on the 3rd podomere; beginning on segment 11, the 2nd-5th podomeres are padded.

Gonopods basically similar to those of *cumminsi* in form of the parasterna and coxae, but the telopodites are distinctly different in structure (compare Figs. 3 and 4) in being terminally ornamented with numerous small spicules, and provided with (1) a small spiculate subterminal process, and (2) a large, broad, flat, distally fringed mesial lobe. The surface of the telopodite is much less distinctly perforated by openings from the internal gland than in *cumminsi*.

Paratypes: Structurally similar to holotype, the two males have 42 and 44 segments and are 3.4 and 3.3 mm in diameter respectively; the larger female has 44 segments and is 3.8 mm in diameter. Specimens of *cumminsi* likewise have 42-45 segments, but are much larger, the males greater than 4.0 mm in diameter, the females greater than 4.5 as a rule. In direct comparison, *cumminsi* appears at least twice as bulky as its smaller congener.

Remarks: *Choctella cumminsi* is likewise bicolored in life, but the dorsum tends to be reddish-orange in color, and there is less impression of a median stripe, the dorsal color diffusing laterally into the blackish lateral pigmentation. In both species, the lighter oval spots and areas are merely the external manifestation of muscle attachments on the inner segmental surfaces. The outermost layer of the body wall is essentially clear and transparent, and in fact the entire posterior half of the metazonites is not underlain by a black layer of pigmentation.

Roebuck Plaza is a small settlement located about half-way between Trussville and Birmingham, in the northeastern quadrant of Jefferson County. This locality is on the eastern side of Red Mountain, which extends southward through Birmingham itself.

All of the many known localities for *C. cumminsi* are, with one exception, restricted to the north side of the Tennessee River (the species has been collected once about a mile south of Guntersville, in Marshall Co., Alabama). At the present time, there is a gap of about 50 miles between the ranges of *cumminsi* and *hubrichti*, which is perhaps more illusory than real. Yet it must be emphasized that Mr. Hubricht has collected millipeds in northern Alabama very assiduously for nearly 15 years, before happening to discover the singular little choctellid which I am pleased to name in his honor. Either *C. hubrichti* is scarce in the sense of having a fragmentary relict status, or else occupies a biotope quite different from that of *cumminsi* further north.

LITERATURE CITED

- CHAMBERLIN, R. V. 1918. Myriapods from Nashville, Tennessee. *Psyche*, 25:23-30.
- CHAMBERLIN, R. V. AND RICHARD L. HOFFMAN. 1950. Some families and genera of North American diplopods. *Chicago Acad. Sci. Nat. Hist. Misc.*, 71:1-7, Figs. 1-2.